# Andrew R. Cline, Ph.D.

### **CURRENT EMPLOYMENT**

Associate Insect Biosystematist

Plant Pest Diagnostics Center California Dept. of Food and Agric. 3294 Meadowview Road Sacramento, CA 95832-1448 TEL: (916) 262-1100 FAX: (916) 262-1190 E-Mail: acline@cdfa.ca.gov

## **EDUCATION QUALIFICATIONS**

Doctorate of Philosophy (Entomology) - Louisiana State University (2005).

Dissertation: Revision of *Pocadius* Erichson (Coleoptera: Nitidulidae).

Organization for Tropical Studies, Tropical Ecology Field Course – Universidad de Costa Rica and Duke University (2002)

Master of Science (Entomology) – University of Missouri (2000).

Thesis: Stylet penetration behaviors of the western tarnished plant bug (Hemiptera: Miridae) on cotton.

Bachelor of Science (Biology/Ecology) – University of Alabama in Huntsville (1996).

Project: Selective herbivory in a shagbark hickory population.

### RESEARCH INTERESTS

## Primary

- Taxonomy/Systematics of Nitidulidae, with particular reference to Nitidulinae and the evolution of life history traits within the subfamily

#### Secondary

- Taxonomy/Systematics of Cucujoidea with emphasis on Kateretidae, Smicripidae, Biphyllidae, Discolomatidae, and Corylophidae.
- Taxonomy of New World Meloidae
- Beetle Biodiversity and Conservation

### **CURRENT RESEARCH THEMES**

- 1. Higher phylogenetics of Nitidulidae using molecular and morphological (adult and larval) datasets.
- 2. Revisions of Platychora, Prometopia, Psilotus, Hebascus, Teichostethus, and other New World Nitidulinae.
- 3. Revision/Monograph of Smicripidae (Coleoptera: Cucujoidea).
- 4. Biodiversity efforts with IBISCA (Investigations in the Biodiversity of Soil and Canopy Arthropods) in Panama, INBio (Instituto Nacional de Biodiversidad) in Costa Rica, and the California Academy of Sciences initiative to assess insect diversity in Madagascar.
- 5. Revision of Tricrania (Coleoptera: Meloidae).

## PROFESSIONAL GOALS & LONG-TERM PROJECTS

My research seeks to answer questions regarding the taxonomic composition and phylogenetic relationships of cucujoid beetles, with particular emphasis on Nitidulidae and their relatives. I also have interest in elucidating feeding behavior patterns and life history traits within Nitidulinae, defining biogeographic patterns of various cucujoid lineages, as well as the use of leaf litter cucujoids in biodiversity/conservation.

### HONORS/AWARDS/FELLOWSHIPS/SCHOLARSHIPS

- 2004. Entomological Society of America, SE Branch, Comstock Award for outstanding Ph.D. student.
- 2003. Florida Entomological Society, graduate scholarship for outstanding Ph.D. student.
- 2003. Entomological Society of America, Program Enhancement Funds for Section A Symposia "Phylogeny of the Cucujoidea I and II".
- 2003. Louisiana State University, Graduate School Travel Award.
- 2002. Entomological Society of America, Honorable Mention in Section A Graduate Student Competition.
- 2002. Louisiana State University, Graduate School Travel Award.
- 2001. Louisiana State University, Graduate School Travel Award.
- 2000. Louisiana State University, Jelinski Fellowship for outstanding graduate students.
- 2000. University of Missouri, Stone Award for outstanding Masters Student (Entomology).
- 1999. University of Missouri, C.V. Riley Entomological Society Award of Merit.
- 1996. University of Alabama Huntsville, Departmental Honors in Biological Sciences.
- 1992. H.L. Ogle Educational Scholarship.

## RESEARCH GRANTS AWARDED

- 2006. USDA-CPHST: Lucid Key to World Bostrichidae Genera.
- 2003. National Science Foundation, Doctoral Dissertation Improvement Grant, DEB 0308764.
- 2003. Sigma Xi, LSU Chapter, Grant-In-Aid of Research.
- 2002. Ernst Mayr Grant, Harvard University, Museum of Comparative Zoology.
- 2002. Florida Entomological Society Travel Grant.
- 2002. Field Museum of Natural History, Visiting Systematist Travel Grant.
- 2002. Canadian Museum of Nature, Visiting Systematist Travel Grant.
- 2001. Organization for Tropical Studies and Smithsonian Tropical Research Institute. A.W. Mellon grant.
- 2001. Sigma Xi, LSU Chapter, Grant-In-Aid of Research.

### REFEREED PUBLICATIONS

## **Book Chapters:**

- Cline, A.R. and F.W. Shockley. [in review]. Biphyllidae LeConte, 1861. In Beutel, R.G. and R.A.B. Leschen (eds.) Handbook of Zoology. Volume IV. Arthropoda: Insecta. Part 38. Coleoptera, Beetles.
- Cline, A.R. and S.A. Ślipiński. [in prep.]. Discolomatidae Horn, 1878. In Beutel, R.G. and R.A.B. Leschen (eds.) Handbook of Zoology. Volume IV. Arthropoda: Insecta. Part 38. Coleoptera, Beetles.
- Cline, A.R. [in review]. Corylophidae LeConte, 1852. In Beutel, R.G. and R.A.B. Leschen (eds.) Handbook of Zoology. Volume IV. Arthropoda: Insecta. Part 38. Coleoptera, Beetles.

## **Research Papers:**

- Backus, E.A., A.R. Cline, M.S. Serrano, and M.R. Ellerseick. [in press]. Lygus hesperus (Knight) (Hemiptera: Miridae) feeding on cotton: New methods and parameters for analysis of non-sequential EPG data. Annals of the Entomological Society of America.
- Majka, C.G. and A.R. Cline. 2006. Nitidulidae and Kateretidae (Coleoptera: Cucujoidea) of the Maritime Provinces of Canada. I. New Records from Nova Scotia and Prince Edward Island. *The* Canadian Entomologist. 138: 314-332.
- Majka, C.G. and A.R. Cline. 2006. New Records of Corylophidae (Coleoptera) from the Maritime Provinces of Canada. *The Coleopterists Bulletin* 60(2): 105-111.
- Cline, A.R. and R.A.B. Leschen. 2005. Coleoptera associated with the Oyster Mushroom, *Pleurotus ostreatus* Fries, in North America. *Southeastern Naturalist.* 4(3): 409-420.
- Ewing, C.P and A.R. Cline. 2005. Key to Adventive Sap Beetles (Coleoptera: Nitidulidae) in Hawaii, with Notes on Records and Habits. *The Coleopterists Bulletin*. 59(2): 167-183.
- Cline, A.R. and C.E. Carlton. 2004. Review of *Lasiodactylus* Perty (Coleoptera: Nitidulidae) with description of three new species from the Neotropics. *The Coleopterists Bulletin*. 58(3): 355-368.
- Cline, A.R. 2004. A new species of *Psilotus* Fischer vonWaldheim (Coleoptera: Nitidulidae) from Peru, with new distribution records for other *Psilotus* species. *Proceedings of the Entomological Society of Washington*. 106(4): 890-898.
- Cline, A.R. 2004. A new sap beetle (Coleoptera: Nitidulidae) to the United States with a revised key to the Camptodes Erichson occurring in America North of Mexico. *Insecta Mundi.* 17(1-2): 101-102.
- Ewing, C.P. and A.R. Cline. 2004. New records and taxonomic updates for the adventive sap beetles (Coleoptera: Nitidulidae) in Hawaii. *Bishop Museum Occasional Papers*, *Records of the Hawaii Biological Survey*, *Part* 2: *Notes*. 79: 40-45.
- Shockley, F.W. and A.R. Cline. 2004. A Contribution to the Inventory of the Coleoptera of Missouri: Records from Benton County. *Journal of the Kansas Entomological Society*. 77(3): 280-284.
- Cline, A.R. and C.E. Carlton. 2004. Two new species of *Epuraea* (*Orthopeplus*) (Coleoptera: Nitidulidae) from Mexico. *Coleopterists Bulletin*. 58(2): 261-270.
- Kirejtshuk, A.G. and Cline, A.R. 2003. Pleoronia tuberculata Kirejtshuk and Cline sp. n. and Stenoronia librodoriformis Kirejtshuk and Cline sp. n. In, Kirejtshuk, A.G. Four new genera of the Soronia complex (Coleoptera: Nitidulidae) from Australia, New Zealand, Fiji, and tropical America with notes on composition of the complex and description of new species from Southern Hemisphere. Russian Entomological Journal. 12(3): 239-256.
- Cline, A.R., F.W. Shockley, and B. Puttler. 2002. Description of surface swimming by *Hypera eximia* LeConte (Coleoptera: Curculionidae): behavioral, morphological, and phylogenetic implications. *Annals of the Entomological Society of America*. 95(5): 637-645.

- Cline, A.R. and E.A. Backus. 2002. Correlations among AC electronic monitoring waveforms, body postures, and stylet penetration behaviors of *Lygus hesperus* (Hemiptera: Miridae). *Environmental Entomology.* 31(3): 538-549.

#### **Scientific Notes:**

- Cline, A.R. [in press]. Commentary on priority of the family-group name Kateretidae Erichson (Cucujoidea). *The Coleopterists Bulletin*.
- Cline, A.R. 2004. New state records for two species of *Thalycra* Erichson (Coleoptera: Nitidulidae) with notes on species sympatry. *The Coleopterists Bulletin*. 58(1): 137-138.
- Cline, A.R. 2003. New distribution records for *Pocadius basalis* Schaeffer (Coleoptera: Nitidulidae: Nitidulinae) from the Southwestern United States. *The Coleopterists Bulletin.* 57: 390.

#### **Book Reviews:**

- Cline, A.R. [in prep.]. "The Beetle Fauna of Rhode Island." By D. Sikes. The Coleopterists Bulletin.
- Cline, A.R. [in press]. "Beetles of the Czech and Slovak Republics." by K.Hůrka. The Coleopterists Bulletin.
- Cline, A.R. 2006. "Contributions to Systematics and Biology of Beetles: Papers Celebrating the 80<sup>th</sup>
  Birthday of Igor Konstantinovich Lopatin." Edited by Konstantinov, A., A. Tishechkin, and L.
  Penev. *The Coleopterists Bulletin* 60(2): 144.
- Cline, A.R. 2004. "Erotylidae (Insecta: Coleoptera: Cucujoidea): Phylogeny and Review. 47." by R.A.B. Leschen. *Coleopterists Bulletin.* 58(4): 600-601.
- Cline, A.R. and E.A. Backus. 2000. "Form and Function of Insect Wings. The Evolution of Biological Structures." by D.L. Grodnitsky. *Journal of Insect Behavior*. 12: 865-867.

### **TEACHING EXPERIENCE**

#### **Lecture Instruction:**

- 2004. Introductory Entomology (1 lecture), Louisiana State University. Guest Lecturer.
- 2003. Introductory Entomology (1 lecture), Louisiana State University. Guest Lecturer.
- 2003. Insect Taxonomy (3 lectures), Louisiana State University. Guest Lecturer.
- 2000. Insects in the Environment (3 lectures), Louisiana State University. Guest Lecturer.
- 1996. Arthropod Biodiversity (6 lectures), University of Alabama Huntsville. *Co-Lecturer*.

#### **Laboratory Instruction:**

- 2003. Insect Taxonomy (2 sessions), Louisiana State University. Guest Instructor.
- 2002. Introductory Entomology (2 sessions), Louisiana State University. Guest Instructor.
- 2002. Insect Ecology (1 session), Louisiana State University. Guest Instructor.
- 2001. Insect Taxonomy (1 session), Louisiana State University. Guest Instructor.
- 2000. Insects in the Environment (1 section), Louisiana State University. *Instructor*.
- 1999. General Entomology (1 section), University of Missouri. *Instructor*.
- 1998. Organismal Biology (4 sections), University of Alabama Huntsville. *Instructor*.
- 1997. Introductory Biology (2 sections), University of Alabama Huntsville. Instructor.
- 1997. Organismal Biology (5 sections), University of Alabama Huntsville. *Instructor*.
- 1997. Introductory Biology (1 section), University of Alabama Huntsville. *Instructor*.
- 1996. Vertebrate Zoology (1 section), University of Alabama Huntsville. Lab Assistant.

## **Teaching Workshops Attended:**

- 2004. National Science Foundation Summer Workshop. "New Approaches and Techniques for Teaching Science: Addressing Environmental Problems to Stimulate Undergraduate Learning." San Antonio, TX.
- 2001. LSU Entomology Department Teaching Workshop.

### FIELD RESEARCH AND TRAVEL

North America

- Alabama, California, Florida, Iowa, Kentucky, Louisiana, Missouri, Tennessee, and Texas Central America
  - Costa Rica: Guanacaste, LaSelva, and Puntarenas

- Panama: Barro Colorado Island

South America

- Bolivia: Santa Cruz District

## **MUSEUM RESEARCH** (museums visited)

Bohart Museum of Entomology, Davis, California, USA

California Academy of Science, San Francisco, California, USA

California State Collection of Arthropods, Sacramento, California, USA

Canadian Museum of Nature, Ottawa, Ontario, Canada

Canadian National Collection, Ottawa, Ontario, Canada

Entomologica Colleccíon, Universidad de Costa Rica, San Jose, Costa Rica

Field Museum, Chicago, Illinois, USA

Florida State Collection of Arthropods, Gainesville, Florida, USA

Louisiana State Arthropod Museum, Baton Rouge, Louisiana, USA

Mississippi Entomological Museum, Starkville, Mississippi, USA

Monte L. Bean Life Science Museum, Provo, Utah, USA

Mountain Farm Museum, Great Smoky Mountains National Park, Gatlinburg, Tennessee, USA

Museo Noel Kempff Mercado, Santa Cruz, Bolivia

Museum of Comparative Zoology, Harvard University, Cambridge, USA

National Museum of Natural History, London, England

W.R. Enns Museum of Entomology, Columbia, Missouri, USA

Zoological Institute, St. Petersburg, Russia

#### PROFESSIONAL SERVICE

2006-2008. Coleotperists Society, Councilor to Executive Committee.

2003. ESA, Organizer/Moderator "Phylogeny of the Cucujoidea (Coleoptera) I and II."

2003. ESA-SE Branch, Co-Organizer of Linnaean Games for Local Arrangements Committee.

2000-2004. Identification of Arthropods for Louisiana State University Agriculture Experiment Station.

## Manuscript Referee:

Acta Entomologica Musei Nationalis Pragae

Entomological News

**Invertebrate Systematics** 

Proceedings of the Entomological Society of Washington

The Coleopterists Bulletin

The Pan-Pacific Entomologist

Zootaxa

## PROFESSIONAL AFFILIATIONS

Associate: Agricultural Experiment Station, Department of Entomology, College of Agricultural and

Environmental Sciences, University of California – Davis.

# PROFESSIONAL SOCIETY MEMBERSHIP & PARTICIPATION

Center for Systematic Entomology Coleopterists Society

Research Associate: Florida State Collection of Arthropods. Gainesville, FL.

Entomological Society of America Entomological Society of Washington Ohio Coleopterists Pacific Coast Entomological Society

## **PROFESSIONAL PRESENTATIONS & WORKSHOPS**

2005 - Entomological Society of America, Ft. Lauderdale, FL - poster

2004 - Sigma Xi, LSU Chapter, Baton Rouge, LA - invited talk

- Entomological Society of America, Salt Lake City, UT - poster

2003 - Entomological Society of America, Cincinnati, OH - invited talk

- H.O. Lund Entomological Society, University of Georgia, Athens, GA - poster

2002 - Entomological Society of America, Ft. Lauderdale, FL - poster

2001 - Organization for Tropical Studies, Costa Rica - invited workshop

- Entomological Society of America, San Diego, CA - 15min. talk

1999 - Entomological Society of America, Atlanta, GA - poster

- Entomological Society of America, North Central Branch Meeting, Des Moines, IA - poster

## **REFERENCES**

- Dr. Robert Anderson, Research Scientist, Canadian Museum of Nature, PO Box 3443, Station D, Ottawa, Ontario, Canada, K1P 6P4, Phone: 613.364.4060, E-mail: <a href="mailto:randerson@mus-nature.ca">randerson@mus-nature.ca</a>
- Dr. Charles Bellamy, Senior Insect Biosystematist, Plant Pest Diagnostics Laboratory, California Department of Food and Agriculture, 3294 Meadowview Rd, Sacramento, CA 95832-1448, Phone: 916-262-1158, E-mail: <a href="mailto:cbellamy@cdfa.ca.gov">cbellamy@cdfa.ca.gov</a>
- Dr. Christopher Carlton, Professor, Department of Entomology, Louisiana State University, Baton Rouge, LA 70803-1710, Phone: 225-578-0425, E-mail: <a href="mailto:ccarlt@lsu.edu">ccarlt@lsu.edu</a>
- Dr. Stephen Gaimari, Senior Insect Biosystematist, Plant Pest Diagnostics Laboratory, California Department of Food and Agriculture, 3294 Meadowview Rd, Sacramento, CA 95832-1448, Phone: 916-262-1131, E-mail: sgaimari@cdfa.ca.gov
- Dr. Michael Thomas, Head Curator, Florida State Collection of Arthropods, PO Box 147100, Gainesville, FL 32614-7100, Phone: 352-372-3505 x 187, E-mail: <a href="mailto:thomasm@doacs.state.fl.us">thomasm@doacs.state.fl.us</a>